Faculty Candidate Seminar

COMPUTATIONAL INFORMATICS FOR IMPROVING EFFICACY OF GENE THERAPY

Thursday February 23, 2017 ● 11:00 AM– 12:15PM ● HPA II RM 345

With the amount of genomic data produced every day, advances in medical sciences and development of new gene modification tools, a revolution in medicine is expected. Recent approval of the first gene therapies by FDA is a leap towards this revolution. Computational methods provide unique opportunities to realize this revolution by providing both an inexpensive framework (in terms of cost, time and safety) to explore the complex biological systems of diseases, and a reduced search space for treatment options. In this talk, I will describe an example of such framework for treatment of Duchenne muscular dystrophy through gene therapy, and highlight some of the challenges and future opportunities.

Dr. Hosna Jabbari

Postdoctoral Fellow, University of Alberta, Canada

Dr. Hosna Jabbari is a Postdoctoral Fellow in the Ingenuity Lab at the University of Alberta, Canada. She received her Ph.D. in Computer Science (Bioinformatics) from the University of British Columbia, Canada, in 2015. Her research is in the area of development of novel diagnostic and therapeutic strategies for human diseases using techniques from computational genomics, bioinformatics, and data science. She has also developed efficient algorithms for RNA secondary structure prediction. Dr. Jabbari has received several awards and scholarships in her graduate and research career thus far, including a CIHR Scholarship and a NSERC Ph.D. Fellowship.

Hosted by: Faculty Cluster Initiative, Genomics and Bioinformatics Cluster, and Department of Computer Science